REMARKS

Reconsideration is requested.

Claims 1-7 are pending.

Claims 1 and 7 have been revised above, without prejudice, in response to the Examiner's comment on page 10 of the Office Action dated February 26, 2009. The claims further emphasize that Ar^1 and Ar^2 are separately defined groups with the indicated definitions. The amendment is believed to obviate the Section 103 rejection of claims 1-6 over JP2003-012619 in combination with Nakata (US 2002/0119382), and the Section 103 rejection of claim 7 over JP2003-012619 in combination with Nakata and JP06-059471. The enamine compounds of the general formula (1) of JP 2003-012619 require substituents Ar^1 and Ar^2 bridged by a group "Z". The enamines of the cited art therefore do not include separate Ar^1 and Ar^2 substituents of the presently claimed invention. Ar^1 and Ar^2 of the compound represented by general formula (1) in the present invention are not connected with each other through Z like Ar^1 and Ar^2 of the compound in the cited reference. Though it is described that Ar^4 and Ar^5 may form a ring structure and a plural of "a" may be connected to form a ring structure in claim 1, Ar^1 and Ar^2 are not described as such. Also substituents of Ar^1 and Ar^2 of exemplified compounds 1 to 220 in page 38 to 69 are described to be all monovalent groups, not to involve divalent or trivalent groups in the specification. One of ordinary skill will appreciate therefore that Ar^1 and Ar^2 do not form a ring structure. Moreover, there is no suggestion in the cited art to have made the enamines of the present claims. The cited Nakata and/or JP06-059471 combined with JP 2003-012619 fail to cure these

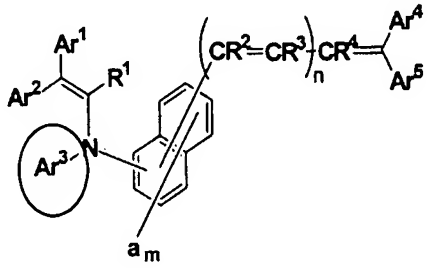
deficiencies. The claims are submitted to be patentable over the cited combinations of JP2003-012619 and Nakata, and JP2003-012619, Nakata and JP06-059471. Entry of the present Amendment and withdrawal of the Section 103 rejections of claims 1-6 over JP2003-012619 in combination with Nakata (US 2002/0119382), and the Section 103 rejection of claim 7 over JP2003-012619 in combination with Nakata and JP06-059471 are requested.

The Section 103 rejection of claims 1-6 over Obata (U.S. Patent Application Publication No. 2004/0101770) and Nakata, and the Section 103 rejection of claim 7 over the combination of Obata, Nakata and JP06-059471 is obviated by the concurrently-filed certified English translation of the claimed priority document (JP 2003-349644). Obata is based on an application filed in the U.S. on September 3, 2003 and is believed to be only citable as a reference under 35 USC § 102(e)(1). The present application claims benefit to Japan 2003-349644 filed October 8, 2003. The applicants note that the subject matter of the cited Obata application and the presently claimed invention were, at the time the claimed invention was made, owned by the same entity or subject to an obligation of assignment to the same entity. Withdrawal of the Section 103 rejection of claims 1-6 over Obata and Nakata, and the Section 103 rejection of claim 7 over the combination of Obata, Nakata and JP06-059471 is requested.

The Section 103 rejection of claims 1 and 3-5 over JP2002-365820 and Nakata is traversed. The Section 103 rejection of claim 6 over JP2002-365820, Nakata and Diamond (Handbook of Imaging Materials, Marcell Dekker, NY, NY, 1991, pp 160-62) is traversed. The Section 103 rejection of claim 7 over JP2002-365820, Nakata and

JP06-059471 is traversed. Reconsideration and withdrawal of these art rejections which are based on the combination of JP2002-365820 and Nakata are requested in view of the comments of record as well as the following further distinguishing comments.

The charge transporting substance of the presently claimed invention requires that when n=0, Ar^3 of the compound of the general formula (1)



(1)

Is a heterocyclic group which may have a substituent.[1]

The corresponding structure of the cited JP 2002-365820 (i.e., R_4 of formula (1)):

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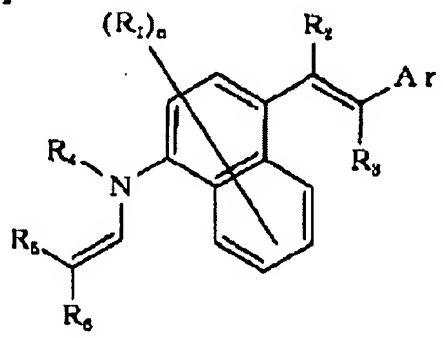


(1)

however is an aryl.

[1] See proviso in last two lines of claim 1.

Specifically, page "4 of 17" of the Patent Office supplied machine translation of JP 2002-365820 provides the following definitions of the substituents of the above structure:

The aryl group in which Ar may have a substituent among [type, an aralkyl group, a heterocycle group or the alkyl group of the carbon numbers 1-5, and R_1, The alkyl group of the carbon numbers 1-5 which may have a substituent, the alkoxy group of the carbon numbers 1-5, The thioalkoxy group of the carbon numbers 1-5, the dialkylamino group of the carbon numbers 1-5 or a hydrogen atom, and R_2, The aralkyl group which may have a substituent, the alkyl group of the carbon numbers 1-5, or a hydrogen atom, The aryl group, aralkyl group and heterocycle group which may have a substituent or the alkyl group of the carbon numbers 1-5, and R_4 R_3, The aryl group, R_5, and R_6 which may have a substituent are the same or different, and the aryl group, aralkyl group and heterocycle group which may have a substituent, the alkyl group of the carbon numbers 1-5 or a hydrogen atom, and n express the integer of 0 to 6. However, when both Ar and R_3 are hydrogen, the case where both R_5 and R_6 are hydrogen is excluded.]

The following parsed version of the passage demonstrates the undersigned understanding of the definitions provided:

and R_1, The alkyl group of the carbon numbers 1-5 which may have a substituent, the alkoxy group of the carbon numbers 1-5, The thioalkoxy group of the carbon numbers 1-5, the dialkylamino group of the carbon numbers 1-5 or a hydrogen atom,

and R_2, The aralkyl group which may have a substituent, the alkyl group of the carbon numbers 1-5, or a hydrogen atom, The aryl group, aralkyl group and heterocycle group which may have a substituent or the alkyl group of the carbon numbers 1-5,

and R_4 R_3, The aryl group,

R_5, and R_6 which may have a substituent are the same or different, and the aryl group, aralkyl group and heterocycle group which may have a substituent, the alkyl group of the carbon numbers 1-5 or a hydrogen atom, and n express the integer of 0 to 6.

The undersigned believes the punctuation of the translation is consistent in that the definition of the substituent following the comma after the naming the substituent defined, such that R_4 and R_3 of the structure of formula (1) of the machine translation of JP 2002-365820 are aryl, which fails to meet the requirements of the presently claimed charge transporting substance.

The Examiner has asserted "The aryl group" following "R_4 R_3" of the Patent Office supplied machine translation of JP 2002-365820 describes "R5 and R6" and that

> the same paragraph teaches that R4 and R3 may be an aryl group, an aralkyl group and a heterocyclic group which may be substituted[2]

By the Examiner's interpretation however the additional repetition of "The aryl group" before "R_5, and R_6" is redundant with the recitation of "the aryl group" which follows "R_5, and R_6". The Examiner's interpretation of the definition of the cited art is understood to read out "The aryl group," following "R_4 R_3," and is understood to combine the definition of R_4 and R_3 with the definition of R_5 and R_6 as follows:

and R_4 R_3, R_5, and R_6 which may have a substituent are the same or different, and the aryl group, aralkyl group and heterocycle group which may have a substituent, the alkyl group of the carbon numbers 1-5 or a hydrogen atom, and n express the integer of 0 to 6.

In fact, the applicants submit that the following is a correct English translation of the definitions of claim 1 of JP 2002-365820, wherein R_4 is defined as an aryl group which may have a substituent:

> [in formula (1), Ar represents an aryl group, an aralkyl group, a heterocyclic group, or an alkyl group having from 1 to 5

[2] See page 8 of the Office Action dated February 26, 2009.

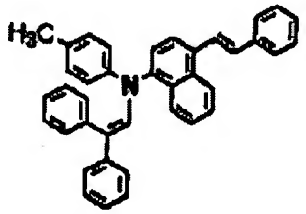
> carbon atoms which may have a substituent; R_1 represents an alkyl group having from 1 to 5 carbon atoms, an aryl group, an alkoxy group having from 1 to 5 carbon atoms, an thioalkoxy group having from 1 to 5 carbon atoms, or a dialkylamino group having from 1 o 5 carbon atoms which may have a substituent or hydrogen atom; R_2 represents an aralkyl group, or an alkyl group having from 1 to 5 carbon atoms which may have a substituent or hydrogen atom; R_3 represents an aryl group, an aralkyl group, a heterocyclic group, or an alkyl group having from 1 to 5 carbon atoms which may have a substituent; R_4 represents an aryl group which may have a substituent; R_5 and R_6 may be the same or different and represents an aryl group, an arlkyl group, a heterocyclic group, or an alkyl group having from 1 to 5 carbon atoms which may have a substituent, or hydrogen atom;...]

The applicants have also previously noted that

> All of the compounds 1-1 to 1-10 exemplified on page "7 of 17" of the machine translation of JP 2002-365820 include an aryl for R_4. [3]

The applicants have not asserted that JP 2002-365820 is limited to the compounds exemplified in structures 1-1 to 1-10.[4] The applicants submit that the above description of JP 2002-365820 wherein R_4 is aryl is further supported by the exemplification of the following embodiments of compounds 1-1 to 1-10 of JP 2002-365820, wherein R_4 is aryl (and not a heterocyclic group):

[3] See page 9 of the Amendment filed November 24, 2008.
[4] See, page 8 of the Office Action dated February 26, 2009 ("Furthermore, contrary to the applicant's assertion, JP '820 is not limited to compounds exemplified tin structures 1-1 to 1-10. A reference is valid for all that it teaches.")



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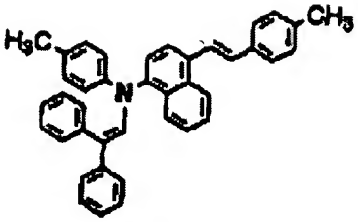

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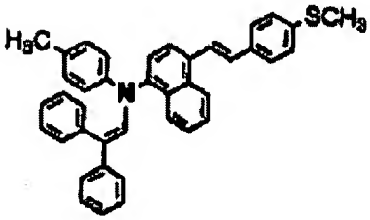

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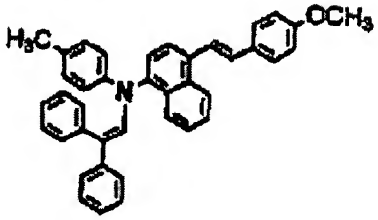

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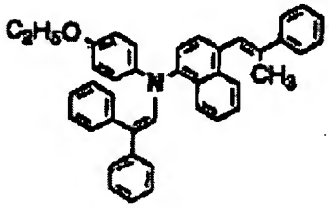

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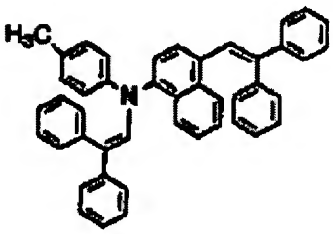

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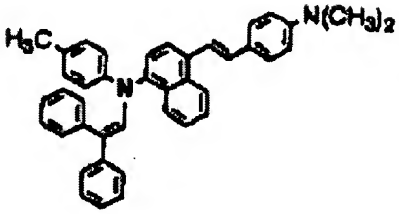

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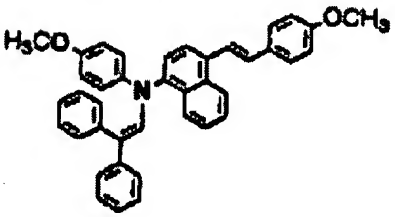

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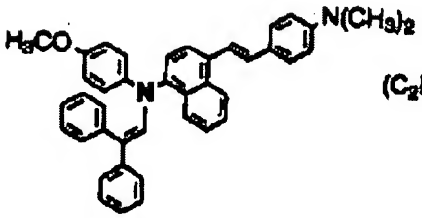

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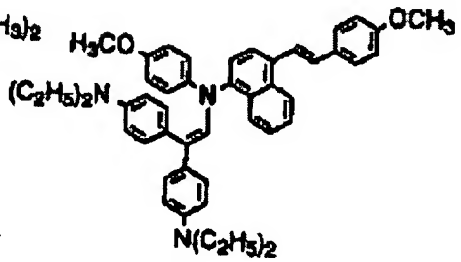

(1-10)

There is no suggestion in the cited art to substitute a heterocyclic group of the present claims for the aryl of the cited art in formula (1) of the cited art to make a charge transporting substance according to the present claims. The cited secondary references (i.e., Nakata, Diamond and JP06-059471) fail to cure this deficiency of JP2002-365820.

Further, Nakata teaches the desire for an outer most protective layer of

> sufficient durability against various external forces including mechanical forces causing surface abrasion and scars,[5]

The outer most surface layer of a photosensitive layer of Nakata is a protective layer. The protective layer contains a cured phenolic resin and a charge transporting substance having a hydroxyl group.[6] The outermost protective layer of Nakata require

> a combination of a <u>specific</u> binder resin and a <u>specific</u> [charge-transporting] compound[7]

Alteration of the <u>specific</u> combination required by Nakata, as is believed to be required to construct the Examiner's combination of art, would have been contrary to the whole of Nakata.

The <u>specific</u> charge transporting compound of Nakata have the following structures:

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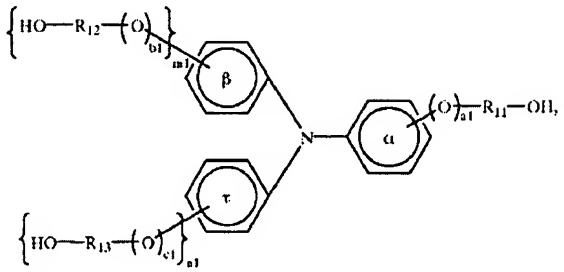
[5] <u>See</u> ¶[0021] and [0024] of Nakata.
[6] <u>See</u> ¶[0026] of Nakata.
[7] <u>See</u> ¶[0032] and [0033] of Nakata (emphasis added).

(1)



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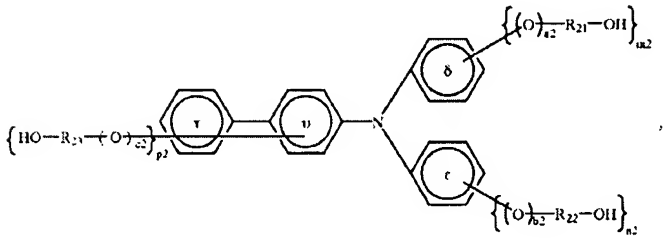

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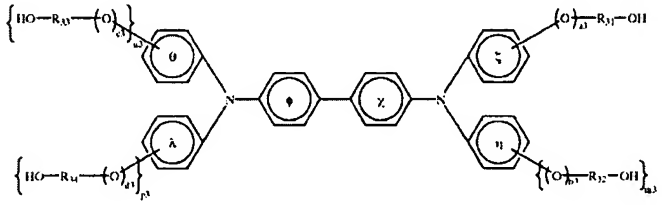

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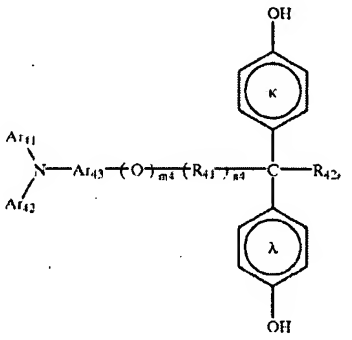

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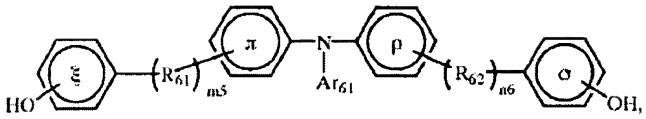

and,[8] while the specific binder resin of Nakata is a resole or a novolak or a mixture of the two.[9]

Alteration of either the binder resin or charge transporting compound of Nakata, as asserted by the Examiner, would have been contrary to Nakata. Moreover, Nakata teaches the importance of the specific combination of components described by Nakata and extrapolation of the teaching of Nakata to other compounds and combinations of components would not have been reasonably predictable and would have been contrary to Nakata. The combination of JP2002-365820 and Nakata, with or without Diamond and JP06-059471 would not have made the presently claimed invention obvious.

As noted previously, the outermost surface layer of Nakata is a hard layer. One of ordinary skill will appreciate that the hard outermost layer of Nakata is produced from the cured phenolic resin of Nakata. Such a very hard layer would not be expected to

[8] See ¶[0041]-[0067] of Nakata.

have a flexibility with a creep value of 2.70 to 5.00% and a flexible layer of the presently claimed invention would have been contrary to the purpose and requirements of the Nakata description.

The Examiner is further understood to believe that JP 2002-365820 teaches, in accord with the teachings of Nakata, that the charge transporting substance bind to the binder resin of the surface charge transporting layer. Both Nakata and JP 2002-365820 teach that the charge transporting compounds be incorporated into the resin network of the surface layer and Nakata teaches that by supplying the charge transport compound in a certain amount respective to the binder resin a desired universal hardness can be achieved. However, the applicants believe the Examiner has misinterpreted the cited art. Although a charge transport material in JP 2002-365820 are described as "bound" to binder resin in the English translation, it does not bond to the binder resin ([0018], line 1 to 2). In Nakata, since hydroxyl group of the charge transport material can react with phenol resin, the charge transport material cross-links with resin to be incorporated into a resin network. In contrast, in JP 2002-365820, since the charge transport material which has not specified functional group mixes in the binder resin such as polycarbonate resin without a reaction, the charge transport material cannot incorporate into the resin network, but exists in the resin as a simple material. The charge transport layer having the resin network with the charge transport material has high intensity and hardness such as in Nakata. In contrast, the charge transport layer having no resin network with the charge transport material has relatively low intensity and hardness

[9] See ¶[0035]-[0037] of Nakata.

such as in JP 2002-365820. Therefore the cited references cannot be combined in a manner asserted by the Examiner.

Withdrawal of the Section 103 rejections based on a combination of JP2002-365820 and Nakata (i.e., the Section 103 rejections of claims 1 and 3-5 over JP2002-365820 and Nakata, of claim 6 over JP2002-365820, Nakata and Diamond , and of claim 7 over JP2002-365820, Nakata and JP06-059471) is requested.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned if anything further is required.

Respectfully submitted,

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